CLAIMS:

1. A method of operating a radio receiver, the radio receiver comprising a radio receiver front-end, the method comprising:

sensing an overload condition in the radio receiver front-end when a received radio signal is above a threshold; and

generating an overload signal in response to sensing the overload condition.

2. The method of claim 1 further comprising:

coupling the overload signal into a radio receiver back-end; and

coupling a locally generated bit pattern into the radio receiver back-end in response to the presence of the overload signal, the locally generated bit pattern being selected such that when processed it causes less noise to accumulate in the radio receiver back-end than if a bit-stream derived from the received radio signal were processed.

3. A method according to claim 1, wherein the step of sensing the overload condition is carried out by measuring an amplitude envelope of the received radio signal.

4. A method according to claim 1, wherein the step of sensing the overload condition is carried out by measuring a signal to noise ratio of the received radio signal.

5. A method according to claim 1, wherein the step of sensing the overload condition is carried out by measuring a carrier to interference ratio of the received radio signal.

6. A method according to claim 2, wherein the locally generated bit pattern is an alternating sequence of high and low binary values.

7. A method according to claim 2, wherein the locally generated bit pattern is a pseudo random sequence.

8. A method according to claim 2, wherein the locally generated bit pattern has the property of an average value tending rapidly towards zero with a substantially zero value standard deviation.

9. A radio receiver front-end for receiving radio signals, the radio receiver front-end comprising:

an overload detector for generating an overload signal when a received radio signal is above a threshold; and

an output port connectable to a radio receiver back-end, the output port used for coupling the overload signal to the radio receiver back-end.

10. The radio receiver front-end of claim 9 integrated into a GPS (Global Positioning System) receiver.

11. The radio receiver front-end of claim 9 further adapted to down-convert the received radio signal from a Radio Frequency (RF) to an Intermediate Frequency (IF), wherein the received radio signal is combined with a locally generated RF signal within a mixer to produce a down-converted copy of the received radio signal.

12. A radio receiver back-end for processing received radio signals, the radio receiver back-end comprising:

an input port connectable to a radio receiver front-end, the input port used for coupling an overload signal into the radio receiver back-end;

a converter for deriving a bit-stream of digital data from a received radio signal; and

a means for substituting the bit-stream of digital data with a locally generated bit pattern in response to receiving the overload signal, the locally generated bit pattern being selected such that when processed it causes less noise to accumulate in the radio receiver back-end than if the bit-stream of digital data were processed.

13. The radio receiver back-end of claim 12 wherein the converter is an analog-to-digital converter.

14. The radio receiver back-end of claim 13 further comprising a correlator and wherein the means for substituting the bit-stream of digital data with a locally generated bit pattern comprises a data modifier having a data input connected to receive the output of the analog-to-digital converter and the data modifier having a control input connected to receive the overload signal from the input port, the data modifier generating and substituting the locally generated bit pattern for the bit-stream of digital data that is input to the correlator when the overload signal is a value that indicates an overload condition.

15. The radio receiver back-end of claim 12 integrated into a GPS (Global Positioning System) receiver.

16. A method of limiting the effect of interfering transmission on a GPS (Global Positioning System) receiver, the GPS receiver comprising a radio receiver front-end, the method comprising:

sensing an overload condition in the radio receiver front-end when a received radio signal is above a threshold; and

generating an overload signal in response to sensing the overload condition.

17. The method of claim 16 further comprising:

coupling the overload signal into a radio receiver back-end of the GPS receiver; and

coupling a locally generated bit pattern into the radio receiver back-end in response to the presence of the overload signal, the locally generated bit pattern being selected such that when processed it causes less noise to accumulate in the radio receiver back-end than if a bit-stream derived from the received radio signal were processed.

18. An overload detector for detecting an overload condition in a radio receiver, the overload detector comprising:

an overload detector for detecting an overload condition in the radio receiver; and

an overload signal generator for generating an overload signal in response to a detected overload condition in the radio receiver.

19. The overload detector of claim 18 in combination with a data modifier, the data modifier coupled to the overload signal generator to receive the overload signal, and the data modifier for providing a locally generated bit stream to the radio receiver when the overload signal is indicative of the detected overload condition.